

(ii) a gear, friction disc, or pulley mounted on a separate shaft and bearing assembly capable of simultaneously driving the synchronized rotation of said gears (“gear driver”); and

(iii) a means for rotating said gear driver to cause the synchronized rotation of said gears in either direction, thereby enabling the convergence of said cameras to be adjusted; and

(b) adjusting the position of the image focal plane of one of said cameras relative to the image focal plane in the other said camera by providing:

(i) a non-adjustable mounting for one of said cameras, said non-adjustable mounting affixed to said gear such that when one of said cameras is attached to said non-adjustable mounting, said camera remains in a fixed position with respect to said gear; and

(ii) an adjustable mounting for the other said camera affixed to the other said gear comprised of two brackets held together at three points by adjustable screws, pins, rods or ties (collectively “screws”) with a spring located in the middle of said adjustable screws applying force opposite to said adjustable screws such as to keep said two brackets separated, but permitting the pitch, roll and distance between said two brackets to be adjusted by turning said adjustable screws; and

(iii) a means for adjusting said adjustable screws in said adjustable mounting such as to alter the pitch, roll and distance between said two brackets, thereby enabling the image focal plane of said camera mounted to said adjustable mounting to be aligned with the image focal plane of the other said camera mounted on the other said non-adjusting mounting; and

(c) the capability to adjust the spacing between the two said cameras such as to mimic the average distance between human eyes by providing:

(i) two adjustable dovetail slides onto which said gears are mounted such as to permit the adjustment of the distance between the center of rotation of each said gear, thereby enabling the effective center to center distance between said cameras to be increased or decreased; and

(d) the capability to adjust the two said cameras such that the two said cameras, while being converged, rotate around the same image (nodal) point by providing:

(i) two adjustable dovetail slides mounted on top of said gears, such as to permit the adjustment of the forward or backward position (along the optical line of sight) of each said camera, thereby enabling the image (nodal) point of each said camera to be individually adjusted along its respective optical line of sight.

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